THE ROLE OF SUBJECT TEACHERS IN PROVIDING A UNIFIED GRAPHICS MODE

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Abstract. The article explains the features of provision of single graphical mode in a comprehensive school, organizational and methodological requirements of graphical knowledge of pupils acquired during training of drafting. According to the author, the use of graphical knowledge of pupils in the teaching of subjects such as geometry, physics, chemistry, geography, etc. contribute to the quality and effectiveness of general education, analyzes the number and characteristics of the graphics that are used in the content of the above mentioned subjects are listed on specific examples graphic images that meet the standards. Firstly, using in the process of school education the different draughts, graphs which are mastered in the process of drawing education carry out the practical application for the graphic knowledge of the pupils. Secondly, they affect positively to the affectivity of the general secondary education by the Principe of integration.

Keywords: graphic knowledge, use, application, unified graphical mode, general education subjects, conditions, process characteristics, drawing, educational information.

Intensive development of scientific and technical progress requires us to increase the level of graphic literacy. The drawing is a document containing technical information. The drawings used in different spheres of production, have their own distinctive features. These features can be in the rules of procedure and the applicable conventions. The teacher of plotting must possess the whole complex of knowledge necessary for him to know; theoretical fundamentals of graphics, geometric constructions; to know the general rules of performing and reading drawings, adopted by the state standard.

Knowledge and skills of pupils on the implementation and reading blueprints is formed on the lessons of drawing. According to the program of the 8th grade provides the following subjects: projection methods, drawings in the system rectangular projection, axonometric projection and technical drawing; methods of performing and reading drawings, sketches (Odilov et al., 2004).

Program of the 9th grade in drawing covers quite a large educational material. Namely section and sections; the definition of the drawing is necessary and sufficient number of images; drawings of typical connections of details; Assembly drawings; construction drawings (Odilov et al., 2004). According to the program goals every high school graduate should know how to apply knowledge on drawing directly on production.

At one time the subjects of drawing were taught in 7, 8, 9, grade 10 (Vasilenko, 1990). Now, almost the same educational material, scheduled for 8-9 grades. Besides, for the passage of this training material provides for only one hour weekly. In such a short time, the teacher should to give knowledge on the basics of graphic activities, to comply with the students a series of graphic works and to fix the received knowledge and skills. In many cases, all that the teacher doesn’t have enough time. Thus, the teacher of plotting to examine the possible effective use of the time allotted to teaching the subject. And also identify additional opportunities to improve efficiency graphic training of students. The use on the lessons of other subjects to consolidate the knowledge and skills received at lessons of drawing, could be one such opportunity. That is, survey and analysis of the learning process, analysis of books and methodical literature showed that in some degree graphic images used in the classroom all disciplines. Especially wide application they find on the lessons of physics, labor, chemistry and geometry. Images of these, the teacher has on the board or use the finished image in place of the posters. Often students require redrawing these images in notebooks.

When performing image teacher and students should be able to use the knowledge acquired on the lessons of drawing.
Therefore, in the process of work on increasing the level of graphic training of students involved teachers in many disciplines.

As already noted, the lessons in different subjects are different images. The use of such images activates the educational process accelerates and facilitates understanding, creates conditions for increase of interest in the subject. The students get acquainted with a lot of graphics images. Images made using lines, lines and points are graphic. They with such images are found not only in the classroom for drawing, but also in the classroom for other subjects as physics, mathematics, chemistry, geography etc (Turaev and Tadjibaev, 2005).

For example, on the lessons of algebra, geometry widely used diagrams, graphs, and images projected on the same plane. On the lessons of physics students are familiar with the drawings and visual images of various technical means. On the lessons of labor studies used the projection of objects on the same plane or technical drawings. In geography lessons with location plans, as well as with the graphics card. At the lessons of chemistry uses images chemical devices. As we can see, graphics at school are widely used in each class and the lessons of all subjects. This, for example, we took 8th grade and asked about the types and numbers used for graphic images on the lessons of the different subjects taught in this class. For from among the trainees of the subjects chose a few basic and analyzed on these subjects, textbooks and additional teaching-methodical (problem books) literature, i.e. have estimated the number used various types of images on the subject. The results of this work are shown in the table. (Tadjibaev, 2008)

<table>
<thead>
<tr>
<th>No.</th>
<th>Textbooks</th>
<th>The number of different images</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Textbook on Geometry</td>
<td>245</td>
</tr>
<tr>
<td>2.</td>
<td>Textbook on Algebra</td>
<td>118</td>
</tr>
<tr>
<td>3.</td>
<td>A textbook on Physics</td>
<td>295</td>
</tr>
<tr>
<td>4.</td>
<td>Textbook on Chemistry</td>
<td>145</td>
</tr>
<tr>
<td>5.</td>
<td>A Geography</td>
<td>170</td>
</tr>
<tr>
<td>6.</td>
<td>The textbook and manuals on labour training</td>
<td>116</td>
</tr>
<tr>
<td>7.</td>
<td>Textbook on computer science</td>
<td>160</td>
</tr>
</tbody>
</table>

The table shows that graphic images used in the classroom almost all subjects. Graphics (drawings, sketches, pictures in the form of axonometric projections or technical drawings, perspective drawings etc.) provide good support and facilitate the creation of a visual representations of these objects, and thereby helps to meaningfully understand course material. But for this it is necessary that teacher’s subject teachers had a full view of all requirements for the implementation and reading blueprints. The reality shows that teachers of different disciplines have different levels graphic training.

For example, teachers who have graduated from the graphic Art faculty of pedagogical Institute and universities have a high level of graphic training. In this respect, quite good preparations are the graduates of the faculty of General technical disciplines and physics. Graduates of the faculties of mathematics, physics, physics and mathematics, mathematics and Informatics, geography, descriptive geometry and engineering graphics are not studied.

Therefore, the teacher of plotting making a special programmed obliged, to brush up on their colleagues in the basics of graphic knowledge so that each one could freely perform on the Board any drawing and could read finish. We believe that this is necessary to organize seminars and consider with the teachers of the following subjects in technical drawing (1 hour each):

1. Formats, frame, angle stamp, line styles, fonts, rules of dimensioning.
2. Species cuts. Simple and complex, and local sections, the combination of form and cut in place.
3. Section. Their species, the location in the drawing and designation.
4. Execution of sketches and drawings of separate details.
5. General information about the axonometric images.
6. Types of standard axonometric projections. Rectangular isometric, rectangular demetria. Sloping front demetria. The image circle is a perspective view.
7. The implementation of a technical drawing.
8. The concept of Assembly drawings and specifications.
9. Implementation of drawings of parts calculated from the Assembly drawing, i.e. Execution detailing Assembly drawing.
10. The dimensions on the drawings of parts made by detailing assembly drawing.

Total 10 hours.

If the subject teachers to conduct classes on above topics, the drawings on the board and posters made by them will be visually literate. Therefore, subject teachers and the teacher of plotting constantly have to work in contact, to exchange opinions. In this case, their assistance in improving graphic literacy will be more tangible.

References: